

CLAIMS

What is claimed is:

1. A process of making an elastomeric polyisoprene article comprising the steps of:
 - a) preparing a compounded latex composition containing an accelerator composition and a stabilizer, said accelerator composition comprising a dithiocarbamate, a thiazole and a guanidine compound;
 - b) dipping a former into said compounded latex composition; and
 - c) curing said compounded latex composition on said former to form said elastomeric polyisoprene article.
2. The process of claim 1, wherein said elastomeric polyisoprene article is a glove.
3. The process of claim 1, wherein said elastomeric polyisoprene article is a condom.
4. The process of claim 1, wherein said elastomeric polyisoprene article is a probe cover.
5. The process of claim 1, wherein said elastomeric polyisoprene article is a catheter.
6. The process of claim 1, wherein said accelerator composition comprises:
zinc diethyldithiocarbamate;
zinc 2-mercaptopbenzothiazole; and
diphenyl guanidine.

7. The process of claim 1, wherein said stabilizer comprises a milk protein salt.
8. The process of claim 7, wherein said stabilizer comprises sodium caseinate.
9. The process of claim 1, wherein said accelerator composition comprises:
a dithiocarbamate to thiazole to guanidine phr ratio of from about 0.50 phr to about 1.00 phr dithiocarbamate, from about 0.50 phr to about 1.00 phr thiazole, from about 0.50 phr to about 1.00 phr guanidine, per 100.0 phr polyisoprene of the compounded latex composition.
10. A synthetic elastomeric polyisoprene article having a tensile of greater than about 3000 psi as measured in accordance with ASTM D412, said article being prepared by a process comprising the steps of:
 - a) preparing a compounded latex composition containing an accelerator composition and a stabilizer, said accelerator composition comprising a dithiocarbamate, a thiazole and a guanidine compound, and a stabilizer;
 - b) dipping a former into said compounded latex composition; and
 - c) curing said compounded latex composition on said former.
11. The article of claim 10, wherein the article is a glove.
12. The article of claim 10, wherein the article is a condom.
13. The article of claim 10, wherein the article is a probe cover.
14. The article of claim 10 wherein the article is a catheter.
15. The article of claim 10, wherein said accelerator composition comprises:
zinc diethyldithiocarbamate;
zinc 2-mercaptopbenzothiazole; and

diphenyl guanidine.

16. The article of claim 10, wherein said stabilizer comprises a milk protein salt.
17. The article of claim 16, wherein said stabilizer comprises sodium caseinate.
18. The article of claim 10, wherein said accelerator composition comprises:
a dithiocarbamate to thiazole to guanidine phr ratio of from about 0.50 phr to about 1.00 phr dithiocarbamate, from about 0.50 phr to about 1.00 phr thiazole, and from about 0.50 phr to about 1.00 phr guanidine, per 100.0 phr polyisoprene of the compounded latex composition.
19. A polyisoprene latex composition comprising:
a dithiocarbamate compound;
a thiazole compound;
a guanidine compound; and
a stabilizer.
20. The latex composition of claim 19 wherein the latex composition comprises:
zinc diethyldithiocarbamate;
zinc 2-mercaptobenzothiazole;
diphenyl guanidine; and
sodium caseinate.
21. An accelerator composition for use in a process for making elastomeric polyisoprene articles, said accelerator composition consisting essentially of:
a dithiocarbamate compound;
a thiazole compound; and

a guanidine compound;

wherein the phr dry weight ratio of each of the dithiocarbamate, thiazole and guanidine ranges from about 0.50 to about 1.00 per 100.0 parts polyisoprene.

22. A glove composed of polyisoprene and having a tensile strength of greater than 3000 psi as measured in accordance with ASTM D412, said glove being prepared from a polyisoprene latex composition comprising a dithiocarbamate compound, a thiazole compound, and a guanidine compound.
23. The glove of claim 18, wherein said polyisoprene latex composition further comprises sodium caseinate.
24. The glove of claim 19, wherein said latex composition is stored for up to about 7 days.